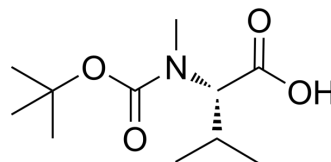


(2S)-2-[[[(tert-Butoxy)carbonyl](methyl)amino]-3-methylbutanoic acid

Cat. No.:	HY-41051		
CAS No.:	45170-31-8		
Molecular Formula:	C ₁₁ H ₂₁ NO ₄		
Molecular Weight:	231.29		
Target:	Amino Acid Derivatives		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (432.36 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	4.3236 mL	21.6179 mL	43.2358 mL
		5 mM	0.8647 mL	4.3236 mL	8.6472 mL
10 mM		0.4324 mL	2.1618 mL	4.3236 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (10.81 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (10.81 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (10.81 mM); Clear solution 				

BIOLOGICAL ACTIVITY

Description	(2S)-2-[[[(tert-Butoxy)carbonyl](methyl)amino]-3-methylbutanoic acid is a valine derivative ^[1] .
In Vitro	<p>Amino acids and amino acid derivatives have been commercially used as ergogenic supplements. They influence the secretion of anabolic hormones, supply of fuel during exercise, mental performance during stress related tasks and prevent exercise induced muscle damage. They are recognized to be beneficial as ergogenic dietary substances^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

REFERENCES

[1]. Luckose F, et al. Effects of amino acid derivatives on physical, mental, and physiological activities. Crit Rev Food Sci Nutr. 2015;55(13):1793-1144.

Caution: Product has not been fully validated for medical applications. For research use only.

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